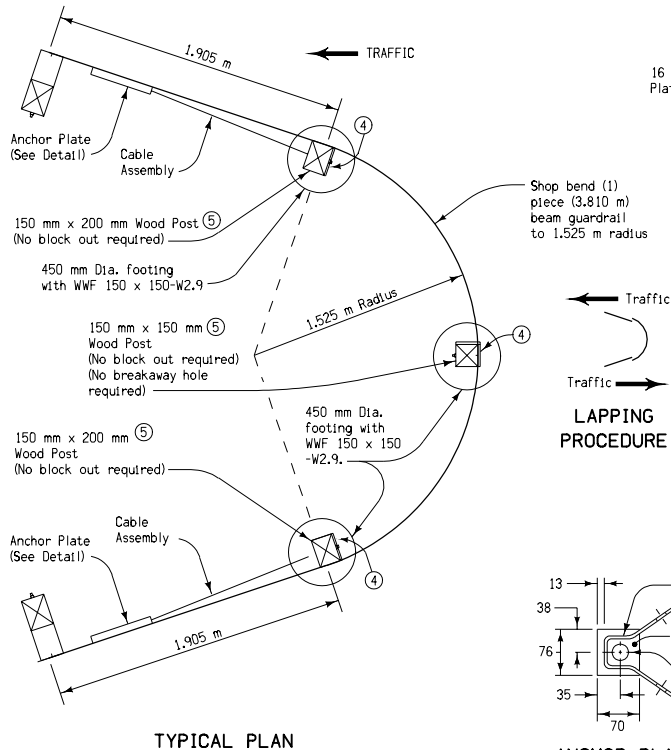
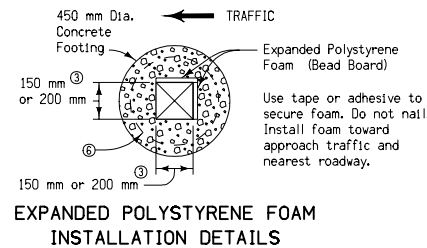
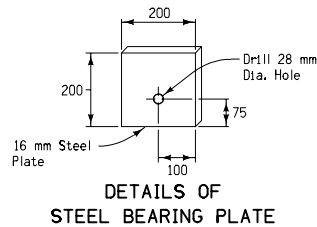
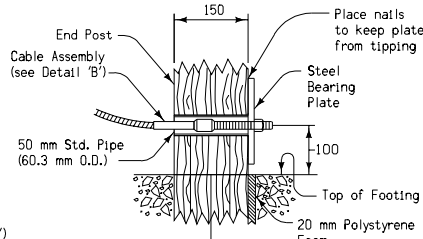
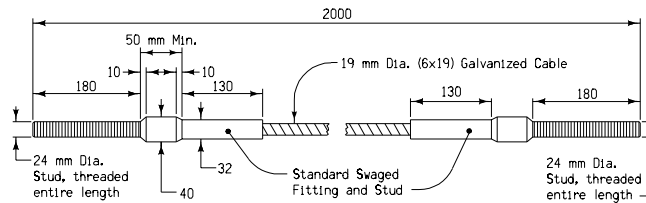


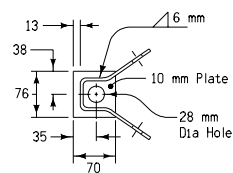
DETAIL 'A'
(Breakaway End Post Detail)



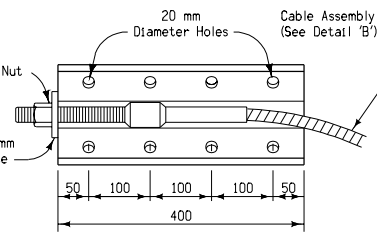
LAPPING
PROCEDURE



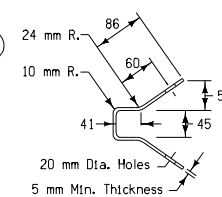
DETAIL 'B' (CABLE ASSEMBLY)



ANCHOR PLATE
END VIEW



DETAIL 'C' - ANCHOR PLATE
ASSEMBLED VIEW



ANCHOR PLATE
FABRICATION
DETAILS

GENERAL NOTES:

The details indicated hereon are for an end anchorage system for beam guardrail. The beam guardrail is part of the RE-53 End Anchorage, but is paid for separately. Refer to the guardrail tabulations and applicable Standard Road Plans for additional details regarding the location and installation of the guardrail.

Cable assembly shall have a minimum breaking strength of 190 kilonewtons (kN).

All fittings and hardware required shall be galvanized after fabrication.

Concrete for anchor shall meet the requirements for Class 'C' Structural Concrete.

The end anchorage post tolerances shall be:

Width	Tolerance
150 mm	- 0 mm, +10 mm
200 mm	- 0 mm, +13 mm

Welding and fabrication shall be in accordance with Article 2408.13 except that gas, metal arc, and flux cored arc welding processes will be permitted.


The price bid for "Guardrail, End Anchorage, Beam, RE-53," each, shall be considered full compensation for furnishing all materials (exclusive of beam guardrail and posts) and work necessary to construct the end anchorage as detailed hereon.

LIST OF MATERIALS FOR GUARDRAIL, END ANCHORAGE, BEAM, RE-53

- (2) Anchor Plate with required fasteners
- (2) Cable Assembly, fabricated as shown hereon including all necessary hardware
- (2) 60.3 mm O.D. x 200 mm Pipe
- (2) 200 mm x 200 mm x 16 mm Steel Bearing Plates, fabricated as detailed
- (1) 3 meter x 1 meter Wire Mesh Reinforcing Steel (Approx.)
- (3) Footings, 1 meter Depth — 0.40 cubic meters (total) of Class "C" Structural Concrete
- Expanded Polystyrene Foam Pieces
 - (2) 20 mm x 235 mm x 1000 mm min.
 - (2) 20 mm x 215 mm x 1000 mm min.
 - (1) 20 mm x 185 mm x 1000 mm min.
 - (1) 20 mm x 165 mm x 1000 mm min.

- (1) Attach 20 mm Expanded Polystyrene Foam to posts before placing concrete footing. (See Expanded Polystyrene Foam Installation Details).
- (2) Place loose dirt 25 mm deep around post bottom to prevent bond to concrete in all three footings.
- (3) As specified in "Typical Plan" on this sheet.
- (4) Steel Bearing Plate.
- (5) Plate washers required. For details, see Standard Road Plan RE-12A.
- (6) WWF 150 x 150-W2.9 Wire Fabric.

All dimensions given in millimeters unless noted.

METRIC VERSION		Iowa Department of Transportation			
		Highway Division			
		STANDARD ROAD PLAN			RE-53
		REVISION: Change to 150 mm x 200 mm post from 200 mm x 200 mm			REVISION NO.
					11
		<i>William J. Sten</i>			REVISION DATE
		APPROVED BY DESIGN METHODS ENGINEER			10-02-01
		DETAILS OF 1.5 METER RADIUS BREAKAWAY END ANCHORAGE			